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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/282,860	03/31/1999	JONATHAN P. BREZIN	YO999-121	9207

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IBM CORPORATION
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EXAMINER

FLEURANTIN, JEAN B

ART UNIT	PAPER NUMBER
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2172

DATE MAILED: 11/18/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/282,860

Applicant(s)

BREZIN ET AL.

Examiner

Jean B Fleurant

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 September 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 and 34-41 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 11, 23, 24, 26-31 and 37-41 is/are rejected.
- 7) ☒ Claim(s) 7-10, 12-22, 25, 32 and 34-36 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Response to Amendment

1. Claims 1-32 and 34-41 are remained pending for examination.
2. Applicant's arguments submitted on 09/31/2002 with respect to claims 1-41 have been fully considered but they are not persuasive.

Response to Applicant' remarks

3. Applicant stated that on page 6, "the Paul system does not teach or suggest relationship information being in or extracted from the incoming e-mail". However, Examiner disagrees because Paul includes the filter application compares the subject data of the received e-mail message with subject preference data entered by the user, notably the subject data from the received message may include 'subject' header information the full text of the e-mail message or both a text search may be performed to determine whether the subject data from the received e-mail contains any of the subject words or phrases entered by the user as preference data if a match is detected the e-mail message is marked with a third display code and displayed to the user in a third distinctive mode using known display techniques these e-mail messages may for example be automatically placed in a special folder created by the user or the filtering application or displayed in a distinctive color, (see col. 7, lines 19-36). Further, in column 1, lines 52 through 60, Paul teaches a system and method for controlling the delivery of unsolicited electronic mail messages over an electronic communications network such as the Internet by identifying the source of identified spam transmissions using spam probes, and automatically

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alerting network servers and/or user terminals to sources of spam in order to activate an effective filter.

In response to applicant's argument on page 8, that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

On page 10, Applicant stated that "there is no suggestion that a relationship data structure be created based on such extraction and integration." However, Paul indicates the spam control center automatically analyzes the received mail to identify the source of the message extracts and processes the source data from the received message, and generates an alert signal containing the processed source data the alert signal may also contain filtering instructions used to enable network servers and user terminals to automatically detect spam this alert signal is broadcast to all network servers or all user terminals or both within the communications network a filtering system implemented at the servers or user terminals automatically receives the alert signal automatically updates stored filtering data using the source data retrieved from the alert signal and automatically controls delivery of subsequently-received e-mail messages from the identified spam source, (see col. 2, lines 2-15). Further, in column in column 6, lines 17 through 21, Paul

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teaches the alert signals received from the control center are automatically processed by the filtering application so that the source data extracted from the alert signals are automatically added to the stored exclusion list.

Claim Rejections - 35 U.S.C. § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6, 11, 23-24, 26-31 and 37-41 are rejected under 35 U.S. C. 103 (a) as being unpatentable over Paul (US Pat. No. 6,052,709) ("Paul").

As per claims 1 and 40, Paul teaches a method to optimize information retrieval based on communication relationships (thus, alert signal generator 105 preferably generates an alert signal incorporating the source data extracted from the received e-mail message as well as other data analyzed by processor 104 the alert signal may also incorporate filtering instructions to be implemented by the user terminals or network servers, which is readable as optimize information retrieval based on communication relationships) (see col. 5, lines 21-27), as claimed, comprises the steps of automatically extracting and integrating relationship information from multiple heterogeneous information sources (thus, alert signals received from the control center are automatically processed by the filtering application so that the source data extracted from the alert signals are automatically added to the stored exclusion list, which is readable as

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automatically extracting and integrating relationship information from multiple heterogeneous information sources (see col. 6, lines 17-21);

automatically modifying an information retrieval query based on the relationship data structure (thus, a user terminal filtering application 200 for use in the present invention includes an exclusion list manager 202 for creating, storing and automatically maintaining a user exclusion list the user exclusion lists preferably includes all identification data needed to determine the status of incoming e-mail messages data in the exclusion list may be divided into categories corresponding to the fields of incoming e-mail messages; which is readable as which is readable as automatically modifying an information retrieval query based on the relationship data structure) (see cols. 5-6, lines 63-4). Further, in column 2, lines 10 through 15, Paul teaches a filtering system implemented at the servers or user terminals automatically receives the alert signal, automatically updates stored filtering data using the source data retrieved from the alert signal and automatically controls delivery of subsequently-received e-mail messages from the identified spam source. But, Paul does not explicitly indicate automatically building and storing a relationship data structure to represent the relationship information. However, Paul indicates the spam control center automatically analyzes the received mail to identify the source of the message extracts and processes the source data from the received message, and generates an alert signal containing the processed source data the alert signal may also contain filtering instructions used to enable network servers and user terminals to automatically detect spam this alert signal is broadcast to all network servers or all user terminals or both within the communications network

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a filtering system implemented at the servers or user terminals automatically receives the alert signal automatically updates stored filtering data using the source data retrieved from the alert signal and automatically controls delivery of subsequently-received e-mail messages from the identified spam source; which is readable as automatically building and storing a relationship data structure to represent the relationship information. (see col. 2, lines 2-15). Further, in columns 8 and 9, lines 55 through 67 and 1 through 17, Paul teaches the data in any of these fields of the incoming email matches data stored in a corresponding field of the inclusion list processor the incoming email is marked junk and marked with a first display code if no match is detected the email filter labels the email message as junk by marking the message with a second display, the email filter interacts with the email message store that processes the email and performs other known functions for multiplicity of email addresses or accounts, the exclusion list processor may store an exclusion list for each email address or alternatively an exclusion list for each group of email addresses organized by domain or other group. Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the teaching of Paul with automatically building and storing a relationship data structure to represent the relationship information. This modification would allow the teachings of Paul to improve the accuracy and reliability of the optimization of system performance based on communication relationship, and provide the advantage of reducing the data traffic flow on a communications link by filtering out junk e-mail before it is stored at the server (col. 9, lines 28-30).

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As per claim 2, Paul teaches a method as claimed, wherein said step of modifying a query comprises the steps of prioritizing and filtering the retrieval of related information (thus, receiving email from specific sources or email messages including certain subject matter by adding source data and subject data to the filtering application exclusion lists, which is readable as wherein said step of modifying a query comprises the steps of prioritizing and filtering the retrieval of related information) (see col. 9, lines 50-53).

As per claims 3 and 4, Paul teaches a method as claimed, wherein said step of modifying a query comprises the steps of augmenting information from the heterogeneous information sources (thus, receiving email from specific sources or email messages including certain subject matter by adding source data and subject data to the filtering application exclusion lists, which is readable as the steps of augmenting information from the heterogeneous information sources) (see col. 9, lines 50-53).

As per claim 5, Paul teaches a method as claimed, wherein the heterogeneous information sources are selected from the group consisting of one or more of: people-managed data sources; organization charts; mailing lists; calendar entries; personal address books; priority lists of contacts; and automated system log type information including phone logs and e-mail logs (thus, method and system for controlling delivery of unsolicited electronic mail messages one or more spam probe email addresses are created and planted at various sites on the communications network in order to insure their inclusion on large scale electronic junk mail mailing lists; which is equivalent to wherein the heterogeneous information sources are selected from the group

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consisting of one or more of: people-managed data sources; organization charts; mailing lists; calendar entries; personal address books; priority lists of contacts) (see abstract, lines 1-20).

As per claim 6, Paul teaches a method as claimed, further comprises the step of assigning different preferences to the heterogeneous information sources (thus, the filtering system email messages marked with the first display code are further processed by the filter using user preference data entered by the user, which is readable as assigning different preferences to the heterogeneous information sources) (see col. 7, lines 16-33).

As per claim 11, Paul teaches a method as claimed, further comprises the step of assigning a weight to each information source based on a preference (see col. 6, lines 28-33);

computing the aggregate communication intensity, based on the weight and the preference (thus, the filter application compares the subject data of the received email message with subject preference data entered by the user, which is readable as computing the aggregate communication intensity, based on the weight and the preference) (see col. 7, lines 15-33).

As per claim 23, Paul teaches a method as claimed, further comprises the step of resolving name ambiguity by using the relationship from the heterogeneous information sources to determine one or more of an e-mail address, phone number, and a full name (see col. 4, lines 22-34).

As per claim 24, Paul teaches a method as claimed, further comprises the step of recommending a communication channel based on a recipient characteristic (thus, processor may also extract and analyze data from other fields of the received email message including other

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header fields, which is readable as recommending a communication channel based on a recipient characteristic) (see col. 5, lines 10-20).

As per claims 26-29, Paul teaches a method as claimed, further comprises the step of detecting inconsistency among data in the heterogeneous information sources (thus, the control center includes a distributor for distributing a probe address to multiple sites on the communications network likely to be accessed by mailers of unsolicited electronic mail, which is readable as detecting inconsistency among data in the heterogeneous information sources) (see col. 2, lines 25-49).

As per claim 30, Paul teaches a method as claimed, further comprises the steps of: integrating the relationship information from the multiple heterogeneous sources using a graph wherein each node represents a communication entity, and a link between a pair of nodes represents the existence of a communication relationship between the two nodes (see figure 1, cols. 3 and 4, lines 59-67 and 1-34).

As per claim 31, Paul teaches a method as claimed, further comprises the step of labeling each link with a communication intensity vector, where each dimension of the communication intensity vector represents a communication intensity from an information source (thus, the processing performed by processor may include analysis of the source header data from the received email message in order to determine the address of the sender or address of the servers relaying the email message from the sender to the spam probe mailbox, and alert signal generator preferably then transmits the alert signal to each server either via an optional dedicated

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communication link or via communications network; which is readable as labeling each link with a communication intensity vector, where each dimension of the communication intensity vector represents a communication intensity from an information source) (see col. 5, lines 10-32).

As per claims 37 and 38, Paul teaches a method as claimed, further comprises the step of modifying the query to create one or more sub-queries (see col. 8, lines 37-41).

As per claim 39, Paul teaches a method as claimed, further comprises the step of excluding results from the sub-queries (thus, once the information contained in the received email message is identified and received by processor, processor analyzes this information using processing methods known in the art and extracts the source header data from the received email message; which is readable as excluding results from the sub-queries) (see col. 5, lines 1-5).

As per claim 41, Paul teaches a method as claimed, further comprises the step of prioritizing and filtering a list of name to e-mail address mapping to facilitate sending e-mail (thus, the filtering system controls delivery of unsolicited email messages by discarding the messages without displaying them to the user the filtering system may also be used to filter email messages sent from the user terminals, which is readable as prioritizing and filtering a list of name to e-mail address mapping to facilitate sending e-mail) (see col. 2, lines 17-24).

Claim Objections

5. Claims 7-10, 12-22, 25, 32 and 34-36 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Conclusion

7. Any inquiry concerning this communication from examiner should be directed to Jean Bolte Fleurantin at (703) 308-6718. The examiner can normally be reached on Monday through Friday from 7:30 A.M. to 6:00 P.M.

If any attempt to reach the examiner by telephone is unsuccessful, the examiner's supervisor, Mrs. KIM VU can be reached at (703) 305-8449. The FAX phone numbers for the Group 2100 Customer Service Center are: ***After Final*** (703) 746-7238, ***Official*** (703) 746-7239, and ***Non-Official*** (703) 746-7240. NOTE: Documents transmitted by facsimile will be entered as official documents on the file wrapper unless clearly marked "***DRAFT***".

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group 2100 Customer Service Center receptionist whose telephone numbers are (703) 306-5631, (703) 306-5632, (703) 306-5633.



Jean Bolte Fleurantin

November 14, 2002

JBF/



JEAN M. CORRIELUS
PRIMARY EXAMINER